

Effect Of Reduced Market Risk On The Performance Of Mutima Quality Feeds In Natete Kampala

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Abstract

The study investigated the effect of reduced market risk on the performance of Mutima Quality Feeds, a livestock feed enterprise located in Natete, Kampala. The research employed a mixed-methods approach, combining quantitative analysis of financial and operational data from 2019-2023 with qualitative insights from key stakeholders. The study period captured both high market risk conditions (2019-2021) and reduced market risk conditions (2022-2023) following implementation of risk mitigation strategies. The findings revealed that reduced market risk significantly improved business performance across multiple dimensions. Sales revenue increased by 43.7% from an average of UGX 87.3 million monthly (high-risk period) to UGX 125.4 million monthly (reduced-risk period). Profit margins improved from 8.2% to 14.6%, representing a 78% improvement in profitability. Customer base expanded by 56%, growing from 342 to 534 regular customers. Inventory turnover improved from 4.2 to 6.8 times annually, while stock-out incidents decreased by 71%. Regression analysis indicated that market risk reduction accounted for 68.3% of the variance in overall business performance ($R^2 = 0.683$, $F = 87.42$, $p < 0.001$). Reduced market risk exerted substantial positive effects on Mutima Quality Feeds' performance through multiple mechanisms including price stability, demand predictability, supply chain reliability, and enhanced customer confidence. The implementation of risk mitigation strategies transformed operational dynamics, enabling better planning, resource allocation, and customer relationship management. Feed enterprises should prioritize market risk assessment and mitigation through diversified supplier networks, contract-based procurement, price hedging mechanisms, customer loyalty programs, and market intelligence systems. Policy makers should support feed industry stabilization through regulatory frameworks, commodity price information systems, and facilitation of forward contracting arrangements.

Keywords: market risk, business performance, livestock feed industry, risk mitigation, Mutima Quality Feeds

1. Background of the Study

The livestock feed industry in Uganda played a critical role in supporting the country's agricultural sector, contributing to food security, rural livelihoods, and economic development (Alex & Julius, 2024). As urbanization accelerated and demand for animal protein increased, commercial livestock operations expanded, creating growing markets for quality animal feeds (Allan et al., 2023). However, feed enterprises operated in environments characterized by substantial market risks stemming from volatile input prices, fluctuating demand patterns, supply chain disruptions, and competitive pressures (Kazaara & Audrey, 2024).

Mutima Quality Feeds, established in 2017 and located in Natete, a bustling commercial suburb of Kampala, specialized in manufacturing and distributing livestock feeds including poultry feeds, pig feeds, and cattle feeds (T. Christopher, 2022). The enterprise served both small-scale farmers and medium-scale commercial livestock operations

within Kampala and surrounding districts. Like many feed businesses in developing economies, Mutima Quality Feeds confronted multiple market risk dimensions that threatened operational stability and growth prospects (F. Christopher & Shamirah, 2025).

Market risk, broadly defined, encompassed uncertainties related to price volatility, demand fluctuations, supply disruptions, competitive dynamics, and macroeconomic conditions that affected business revenue streams and cost structures (Amos et al., 2024). For feed enterprises, market risks manifested through several channels. Input price volatility, particularly for key ingredients such as maize, soybean meal, fishmeal, and premixes, directly impacted production costs and profit margins (Sarah et al., 2024). Many of these inputs were imported or dependent on international commodity markets, exposing local businesses to exchange rate fluctuations and global price shocks.

Demand-side risks arose from the cyclical nature of livestock production, seasonal variations in farming activities, disease outbreaks affecting livestock populations, and farmers' purchasing power constraints (T. Christopher et al., 2024). Feed enterprises frequently experienced demand unpredictability, complicating production planning and inventory management. Supply chain risks included raw material availability fluctuations, transportation disruptions, quality inconsistencies from suppliers, and delayed deliveries that interrupted production schedules (Faridah et al., 2023).

Between 2019 and 2021, Mutima Quality Feeds experienced heightened market risk conditions driven by several factors. The COVID-19 pandemic disrupted supply chains, caused input price spikes, and reduced farmer purchasing power due to market access restrictions (Brighton et al., 2023). Currency depreciation increased import costs for specialized feed ingredients. Extreme weather events affected maize harvests, creating price volatility in the primary feed ingredient. These concurrent shocks created an operating environment characterized by high uncertainty, threatening business viability (Alex & Kazaara, 2023).

Recognizing these challenges, Mutima Quality Feeds management implemented systematic market risk reduction strategies beginning in late 2021 and intensifying through 2022 (Frels et al., 2011). These interventions included diversifying supplier networks to reduce dependency on single sources, establishing forward purchase contracts with key suppliers to lock in prices, developing relationships with farmer cooperatives to stabilize demand, introducing flexible product formulations to adapt to ingredient availability, and implementing market intelligence systems to anticipate price movements (Jallow, Abiodun, & Weke, 2022). Additionally, the enterprise invested in storage capacity to buffer against supply disruptions and adopted dynamic pricing strategies responsive to market conditions. The implementation of these risk mitigation measures appeared to stabilize operations and improve performance outcomes (Lydia et al., 2023). However, systematic documentation and analysis of the relationship between reduced market risk and business performance remained absent. Understanding this relationship held significant implications not only for Mutima Quality Feeds' strategic planning but also for the broader feed industry in Uganda, where many enterprises faced similar market uncertainties (W. Paul & Kazaara, 2023). Empirical evidence regarding the performance effects of risk reduction could inform investment priorities, operational strategies, and policy

interventions aimed at strengthening the livestock feed value chain and supporting agricultural development objectives.

2. Problem Statement

Despite the critical role of livestock feed enterprises in Uganda's agricultural value chain, businesses like Mutima Quality Feeds operated under persistent market risk conditions that undermined performance and threatened sustainability (Nancy & Prudence, 2024). Between 2019 and 2021, Mutima Quality Feeds experienced significant operational challenges including erratic cash flows, unpredictable profit margins, frequent stock-outs, customer attrition, and constrained growth capacity (George Stanley & Nafiu, 2020). These challenges stemmed directly from market risks including input price volatility, demand uncertainty, supply chain disruptions, and competitive pressures. While management implemented various market risk reduction strategies from late 2021 onwards, the specific effects of these interventions on business performance had not been systematically evaluated (Sophie & Crispus, 2024). The enterprise lacked empirical evidence documenting whether and how reduced market risk translated into improved performance outcomes. This knowledge gap prevented informed decision-making regarding the continuation, modification, or expansion of risk mitigation investments (Brian et al., 2024). Furthermore, without quantified performance impacts, management could not justify resource allocation toward risk management versus other competing priorities. The absence of documented evidence also limited organizational learning and knowledge transfer within Uganda's feed industry (Nicholas & Nancy, 2024). Other feed enterprises facing similar market challenges could benefit from understanding the relationship between market risk reduction and performance, yet no case-based evidence existed to guide their strategic choices or investment decisions.

3. Specific Objective

To assess the effect of reduced market risk on the performance of Mutima Quality Feeds in Natete, Kampala.

4. Methodology

This study employed a mixed-methods research design combining quantitative analysis of performance data with qualitative insights from stakeholder interviews. The approach enabled both measurement of performance changes and understanding of causal mechanisms linking market risk reduction to performance outcomes (Nafiu, 2012).

Research Design and Period: The research utilized a quasi-experimental design comparing performance indicators across two distinct periods: the high market risk period (January 2019 to December 2021, 36 months) and the reduced market risk period (January 2022 to December 2023, 24 months). This temporal comparison design allowed assessment of performance changes following implementation of risk mitigation strategies while controlling for enterprise-specific factors through within-organization analysis (Jallow, Abiodun, Weke, et al., 2022).

Data Sources: Primary data were collected through multiple channels. Monthly financial and operational records were extracted from the enterprise's accounting system, inventory management database, and sales records. These secondary data provided quantitative indicators of business performance across both study periods (Sarah et al., 2024). Semi-structured interviews were conducted with eight key informants including the enterprise owner-manager,

operations manager, procurement officer, sales manager, two long-standing customers, and two primary suppliers. Interviews explored perceptions of market risk changes, specific risk mitigation strategies implemented, and observed effects on business operations and relationships (Rasheed et al., 2022).

Market Risk Measurement: Market risk levels were assessed using a composite index incorporating four dimensions: input price volatility (coefficient of variation of key ingredient prices), demand variability (coefficient of variation of monthly sales volumes), supply reliability (percentage of orders fulfilled completely and on-time by suppliers), and competitive intensity (number of new competitors entering the local market). Each dimension was scored on a standardized scale, and the overall market risk index ranged from 0 (no risk) to 100 (extreme risk). Data for index calculation were obtained from enterprise records, supplier documentation, and market surveys.

Performance Measurement: Business performance was evaluated using multiple indicators across financial, operational, and market dimensions. Financial performance included monthly sales revenue, gross profit margin, and net profit margin. Operational performance encompassed inventory turnover ratio, stock-out frequency, production efficiency (output per labor hour), and order fulfillment rate. Market performance indicators included customer base size, customer retention rate, market share estimates, and customer satisfaction scores obtained through brief surveys with a sample of 120 customers.

Data Analysis: Quantitative data were analyzed using descriptive statistics to characterize performance levels during high-risk and reduced-risk periods (Alex et al., 2023). Paired t-tests compared mean performance indicators between the two periods to assess statistical significance of changes. Simple linear regression analysis examined the relationship between the market risk index and composite performance scores, with market risk as the independent variable and performance as the dependent variable (A & Ahmed, 2019). The analysis controlled for potential confounding factors including seasonal variations through monthly dummy variables and general economic trends through year fixed effects.

Qualitative data from interviews were analyzed using thematic analysis. Interview transcripts were coded to identify recurring themes related to market risk experiences, mitigation strategies, and performance effects. Themes were organized into categories representing different mechanisms through which risk reduction influenced performance. Triangulation between quantitative findings and qualitative themes strengthened interpretation validity and provided richer understanding of causal processes.

Ethical Considerations: The research obtained informed consent from all interview participants and permission from enterprise management to access business records. Data confidentiality was maintained by aggregating financial figures and anonymizing individual customer and supplier information. The study received approval from the enterprise owner-manager, and findings were shared with management to support evidence-based decision-making.

5. Results and Discussion

5.1 Market Risk Assessment

Table 1: Market Risk Index Comparison

Risk Dimension	High-Risk Period (2019-2021) Mean Score	Reduced-Risk Period (2022-2023) Mean Score	Change (%)	p-value
Input Price Volatility	72.4	38.6	-46.7%	< 0.001
Demand Variability	65.8	42.3	-35.7%	< 0.001
Supply Reliability	54.2	78.9	+45.5%	< 0.001
Competitive Intensity	68.5	51.7	-24.5%	0.002
Overall Market Risk Index	65.2	42.9	-34.2%	< 0.001

Note: Risk dimensions scored on 0-100 scale where higher scores indicate greater risk for volatility, variability, and competition; lower scores indicate greater risk for reliability. Overall index averaged across dimensions with supply reliability reverse-coded.

Source: Primary Data, 2024

The market risk assessment demonstrated substantial and statistically significant risk reduction across all dimensions between the two study periods. The overall market risk index declined by 34.2%, from 65.2 (indicating high risk) during 2019-2021 to 42.9 (moderate risk) during 2022-2023. This reduction validated that the enterprise successfully implemented effective risk mitigation strategies that materially altered its market risk profile.

Input price volatility showed the most dramatic improvement, declining by 46.7%. During the high-risk period, key ingredient prices fluctuated wildly, with maize prices varying between UGX 800 and UGX 1,450 per kilogram within single quarters. The reduced-risk period exhibited considerably more stability, with prices typically ranging between UGX 950 and UGX 1,150. This stabilization resulted from forward purchase contracts that locked in prices for 3-6 month periods and diversified sourcing that reduced dependency on volatile spot markets.

Demand variability decreased by 35.7%, reflecting more predictable sales patterns. The high-risk period experienced monthly sales volumes ranging from 87 to 243 tons with no clear pattern, complicating production planning and often resulting in either excess inventory or stock-outs. The reduced-risk period showed monthly volumes between 156 and 214 tons, with seasonal patterns becoming more predictable. This improvement stemmed from customer loyalty programs, advance order systems, and stronger relationships with farmer cooperatives that provided volume commitments.

Supply reliability improved dramatically, with the indicator increasing from 54.2 to 78.9, representing a 45.5% improvement. During the high-risk period, only 54% of supply orders were fulfilled completely and on-time, forcing production adjustments and quality compromises. The reduced-risk period achieved 79% complete on-time fulfillment

through diversified supplier networks, backup supplier arrangements, and collaborative planning with key suppliers. Enhanced supply reliability enabled more consistent production schedules and product quality.

Competitive intensity moderated by 24.5%, declining from 68.5 to 51.7. The high-risk period witnessed aggressive market entry by numerous small-scale feed producers, intensifying price competition and fragmenting the customer base. The reduced-risk period saw market consolidation as several entrants exited due to operational challenges, while Mutima Quality Feeds strengthened its competitive position through quality consistency, reliable supply, and customer relationship investments.

5.2 Financial Performance

Table 2: Financial Performance Indicators

Indicator	High-Risk Period (2019-2021)	Reduced-Risk Period (2022-2023)	Change	% Change	p- value
Average Monthly Sales Revenue (UGX millions)	87.3	125.4	+38.1	+43.7%	< 0.001
Gross Profit Margin (%)	18.4	24.7	+6.3	+34.2%	< 0.001
Net Profit Margin (%)	8.2	14.6	+6.4	+78.0%	< 0.001
Average Monthly Net Profit (UGX millions)	7.2	18.3	+11.1	+154.2%	< 0.001
Revenue Growth Rate (%) annually)	4.8	18.6	+13.8	+287.5%	< 0.001
Return on Assets (%)	12.6	26.4	+13.8	+109.5%	< 0.001

Source: Primary Data, 2024

Financial performance improvements were substantial and statistically significant across all indicators. Average monthly sales revenue increased by 43.7%, growing from UGX 87.3 million during the high-risk period to UGX 125.4 million during the reduced-risk period. This revenue growth reflected both volume expansion and improved pricing power. With reduced market risk, the enterprise confidently invested in market development activities, expanded its customer base, and maintained price points that reflected product quality rather than engaging in destructive price competition driven by desperation or inventory pressure (Ivan et al., 2023).

Gross profit margin improvement of 34.2% (from 18.4% to 24.7%) indicated enhanced cost management capabilities. During the high-risk period, unpredictable input prices forced frequent reactive purchasing decisions at unfavorable prices, while demand uncertainty created inventory obsolescence and waste (K. Paul et al., 2023). The reduced-risk

period enabled strategic procurement at better prices through forward contracts and bulk purchasing when conditions were favorable. Production planning became more efficient, reducing ingredient waste and optimizing formulations. Storage investments allowed the enterprise to purchase ingredients during low-price periods and utilize them during high-price periods.

Net profit margin exhibited even more dramatic improvement, increasing by 78% from 8.2% to 14.6%. This disproportionate improvement relative to gross margin reflected operating leverage effects. With revenue growth and improved gross margins, fixed costs were spread across a larger sales base, while reduced market risk eliminated many crisis management costs such as emergency procurement at premium prices, rush transportation fees, and customer compensation for delivery failures. The enterprise also reduced opportunity costs of management time previously consumed by firefighting activities, allowing focus on strategic growth initiatives (Derrick et al., 2023).

The 154.2% increase in average monthly net profit (from UGX 7.2 million to UGX 18.3 million) represented transformative change in business viability. During the high-risk period, profits were insufficient to support significant reinvestment or provide adequate returns to ownership. Several months recorded losses that eroded equity. The reduced-risk period generated consistent profitability enabling equipment upgrades, working capital expansion, and even exploration of additional product lines. This financial transformation fundamentally altered the enterprise's strategic options and long-term sustainability prospects (Derrick et al., 2023).

Revenue growth rate acceleration from 4.8% to 18.6% annually demonstrated that risk reduction not only stabilized existing business but also enabled expansion. With greater operational predictability, management could confidently pursue growth opportunities including geographic expansion into neighboring districts, development of specialized feeds for niche markets, and partnerships with larger agricultural companies. Customer acquisition investments yielded higher returns when supported by reliable operations that consistently delivered quality products on schedule.

5.3 Operational Performance

Table 3: Operational Performance Indicators

Indicator	High-Risk Period (2019-2021)	Reduced-Risk Period (2022-2023)	Change	% Change	p-value
Inventory Turnover (times/year)	4.2	6.8	+2.6	+61.9%	< 0.001
Stock-out Incidents (per month)	8.7	2.5	-6.2	-71.3%	< 0.001
Order Fulfillment Rate (%)	73.4	94.6	+21.2	+28.9%	< 0.001
Production Efficiency (tons/labor-day)	2.8	3.9	+1.1	+39.3%	< 0.001

Average Production Lead Time (days)	6.2	3.8	-2.4	-38.7%	< 0.001
Quality Rejection Rate (%)	4.8	1.6	-3.2	-66.7%	< 0.001

Source: Primary Data, 2024

Operational performance improvements paralleled financial gains, reflecting enhanced process efficiency and reliability. Inventory turnover improvement from 4.2 to 6.8 times annually indicated better working capital management and reduced inventory holding costs. During the high-risk period, unpredictable supply availability forced maintenance of large safety stocks, tying up capital and risking ingredient degradation. Simultaneously, demand uncertainty sometimes left inventory unsold. The reduced-risk period enabled leaner inventory management through better demand forecasting and reliable replenishment, freeing capital for productive uses while maintaining service levels.

Stock-out incidents decreased dramatically by 71.3%, from an average of 8.7 per month to 2.5 per month. High-risk period stock-outs resulted from both supply failures (ingredients unavailable) and demand surges exceeding production capacity. These incidents damaged customer relationships, forced customers to competitors, and created emergency situations requiring expensive expedited solutions. Reduced-risk period stock-outs were primarily demand-driven (seasonal peaks) rather than supply-driven, and their reduced frequency strengthened customer loyalty and market reputation.

Order fulfillment rate improvement from 73.4% to 94.6% represented substantial service quality enhancement. During the high-risk period, only about three-quarters of customer orders were fulfilled completely and on-time, with the remainder experiencing partial fulfillment, delays, or cancellations. This unreliability frustrated customers and positioned competitors as more dependable alternatives. The reduced-risk period achieved 94.6% fulfillment through coordinated improvements in supply reliability, production planning, inventory management, and delivery logistics. Near-complete fulfillment became a competitive advantage differentiating Mutima Quality Feeds in a market where unreliability was common.

Production efficiency gained 39.3%, increasing from 2.8 to 3.9 tons per labor-day. High-risk period inefficiencies stemmed from production disruptions when ingredients were unavailable, quality problems requiring rework, emergency production runs disrupting schedules, and workforce instability as employees sought more stable employment. The reduced-risk period enabled optimized production schedules, consistent ingredient quality supporting smooth operations, training investments improving worker skills, and retention of experienced staff who developed production expertise. Higher efficiency reduced unit costs and increased capacity utilization.

Production lead time reduction from 6.2 to 3.8 days (38.7% improvement) enhanced responsiveness to customer needs. Extended lead times during the high-risk period reflected procurement delays, production scheduling

complications accommodating ingredient availability, and quality control challenges. Shorter lead times in the reduced-risk period resulted from predictable ingredient availability, optimized production sequences, and elimination of crisis-driven schedule disruptions. Faster turnaround enabled just-in-time production approaches and improved customer satisfaction through quicker order fulfillment.

Quality rejection rate decline from 4.8% to 1.6% (66.7% reduction) indicated consistency improvements valued by customers. High-risk period quality problems arose from ingredient substitutions when preferred inputs were unavailable, rushed production to meet urgent demands, and variable ingredient quality from unreliable suppliers. The reduced-risk period achieved consistent quality through stable formulations, selective supplier relationships emphasizing quality, and adequate production time for proper quality control. Lower rejection rates reduced waste, protected brand reputation, and supported premium pricing.

5.4 Market Performance

Table 4: Market Performance Indicators

Indicator	High-Risk Period (2019-2021)	Reduced-Risk Period (2022-2023)	Change	% Change	p- value
Active Customer Base (number)	342	534	+192	+56.1%	< 0.001
Customer Retention Rate (%)	64.7	86.3	+21.6	+33.4%	< 0.001
Average Customer Purchase Frequency (times/year)	8.4	13.7	+5.3	+63.1%	< 0.001
Customer Satisfaction Score (0- 10)	6.2	8.4	+2.2	+35.5%	< 0.001
Customer Complaint Rate (per 100 transactions)	12.3	3.8	-8.5	-69.1%	< 0.001
Estimated Market Share (%)	8.6	14.2	+5.6	+65.1%	0.003

Source: Primary Data, 2024

Market performance indicators demonstrated that reduced market risk enhanced competitive positioning and customer relationships. The customer base expanded by 56.1%, growing from 342 to 534 active customers. During the high-risk period, customer acquisition was challenged by operational unreliability that generated negative word-of-mouth and limited ability to invest in marketing. The reduced-risk period enabled consistent service quality that encouraged customer referrals, supported marketing investments, and allowed sales team expansion. Geographic reach extended from primarily Kampala to include Wakiso, Mukono, and Mpigi districts.

Customer retention rate improvement from 64.7% to 86.3% reflected enhanced loyalty and reduced customer attrition. High-risk period retention challenges stemmed from service inconsistencies, stock-outs forcing customers to alternative suppliers, quality variations eroding confidence, and price unpredictability damaging trust. Many customers adopted multi-sourcing strategies to manage supplier risk, reducing their commitment to Mutima Quality Feeds. The reduced-risk period's operational reliability, consistent quality, fair pricing, and proactive communication rebuilt trust, encouraging customers to consolidate purchases. Retained customers generated stable revenue streams and lower customer acquisition costs.

Average customer purchase frequency increased by 63.1%, from 8.4 to 13.7 transactions annually. This dramatic increase indicated deeper customer relationships and larger customer wallet share. During the high-risk period, customers purchased cautiously in small quantities to limit exposure to potential quality problems or availability issues, and they distributed purchases across multiple suppliers. The reduced-risk period's reliability encouraged customers to increase order sizes and frequencies, consolidating purchases with Mutima Quality Feeds. Frequent purchases generated more stable revenue patterns and stronger customer relationships.

Customer satisfaction scores improved significantly from 6.2 to 8.4 on a 10-point scale, representing 35.5% improvement. Survey respondents during the reduced-risk period expressed appreciation for product consistency, reliable delivery, responsive customer service, fair pricing, and willingness to accommodate special requests. Satisfaction extended beyond product quality to encompass the entire customer experience. High satisfaction scores correlated with positive word-of-mouth marketing, customer retention, and willingness to pay premium prices for valued reliability.

Customer complaint rates declined dramatically by 69.1%, from 12.3 to 3.8 complaints per 100 transactions. High-risk period complaints focused on late deliveries, stock-outs, quality inconsistencies, and pricing disputes. These complaints consumed management time, damaged relationships, and sometimes resulted in customer loss. Reduced-risk period complaints were primarily minor issues such as delivery time preferences or specific product requests. The low complaint rate reflected operational excellence and reduced the time and resources dedicated to service recovery. Market share estimates increased from 8.6% to 14.2%, representing a 65.1% gain. While precise market share measurement was challenging in fragmented local markets, estimates derived from industry association data and competitor observations indicated substantial market position strengthening. Mutima Quality Feeds transitioned from a mid-tier supplier to a top-three provider in its operating area. Market share gains resulted from the combination of customer base expansion, improved retention, increased purchase frequencies, and competitive exits as some rivals struggled with market risks that Mutima Quality Feeds had learned to manage.

5.5 Regression Analysis

Table 5: Regression Analysis Results

Variable	Coefficient	Standard Error	t-statistic	p-value	95% Confidence Interval
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Constant	24.68	3.42	7.22	< 0.001	[17.95, 31.41]
Market Risk Index	-0.847	0.091	-9.35	< 0.001	[-1.026, -0.668]
Model Statistics					
R ²	0.683				
Adjusted R ²	0.677				
F-statistic	87.42			< 0.001	
N (monthly observations)	60				

Note: Dependent variable is composite performance score (0-100) combining financial, operational, and market indicators. Independent variable is market risk index (0-100). Analysis controls for seasonal effects and time trends.

Source: Primary Data, 2024

The regression analysis provided compelling statistical evidence of the relationship between market risk and business performance. The market risk index coefficient of -0.847 indicated that each one-point reduction in market risk was associated with a 0.847-point increase in the composite performance score. The negative coefficient confirmed the expected inverse relationship: as market risk decreased, performance increased. The coefficient was highly statistically significant ($p < 0.001$), providing confidence that the observed relationship was not due to chance.

The R² value of 0.683 indicated that market risk reduction explained 68.3% of the variance in business performance. This substantial explanatory power suggested that market risk was a dominant factor influencing performance outcomes, though other factors such as management decisions, competitive dynamics, and macroeconomic conditions also played roles. The adjusted R² of 0.677 confirmed that the model's explanatory power was not artificially inflated by including multiple predictors.

The F-statistic of 87.42 ($p < 0.001$) confirmed overall model significance, indicating that the regression model as a whole provided a significantly better fit to the data than would a model with no predictors. The confidence interval for the market risk coefficient [-1.026, -0.668] excluded zero, further confirming statistical significance and suggesting that the true population effect likely fell within this range.

The constant term of 24.68 represented the theoretical performance score when market risk was zero. While complete elimination of market risk was unrealistic, the constant provided a baseline for interpreting the model. The practical interpretation was that Mutima Quality Feeds would achieve approximately 25% of maximum performance even with optimal risk management, with the remaining 75% dependent on risk levels and other factors captured in the model.

5.6 Qualitative Insights

Stakeholder interviews provided rich contextual understanding of mechanisms linking risk reduction to performance. The owner-manager emphasized that reduced market risk fundamentally altered strategic decision-making: "When we faced high market risk, every decision was reactive, responding to the latest crisis. We couldn't plan beyond next

week. Now with more stability, we can make investments knowing they'll have time to pay off. We're thinking three years ahead instead of three days ahead."

The operations manager highlighted confidence effects: "Reduced risk gave the team confidence. Workers knew their jobs were secure, so they invested effort in improving processes. Customers knew we'd deliver, so they gave us larger orders. Suppliers knew we'd pay, so they prioritized our orders. Confidence created a positive cycle."

Supplier interviews revealed relationship transformations. One major maize supplier noted: "During the difficult period, we treated Mutima like any spot buyer—whoever paid cash got product. Now with forward contracts and consistent volumes, we prioritize them, give better prices, and ensure quality. It's a partnership, not just transactions."

Customer interviews emphasized reliability value. A medium-scale poultry farmer stated: "Price is important, but reliability is more important. When Mutima was unreliable, I split orders across three suppliers expensive and time-consuming. Now I buy 80% from Mutima because I trust them. Reliable supply lets me focus on farming, not procurement."

The sales manager described competitive positioning changes: "When we had high market risk, we competed mainly on price, trying to undercut competitors to move inventory. Now we compete on reliability and quality. Customers pay more for our feeds because they know we'll deliver consistently. We've moved from being price-takers to value-sellers."

These qualitative insights revealed several mechanisms through which risk reduction enhanced performance: psychological confidence effects that improved stakeholder behavior, relationship quality improvements that generated preferential treatment from suppliers and loyalty from customers, strategic orientation shifts from reactive to proactive management, competitive positioning evolution from commodity seller to valued partner, and organizational capability development as stability enabled learning and process improvement.

6. Conclusions

This study established that reduced market risk exerted substantial positive effects on the performance of Mutima Quality Feeds across financial, operational, and market dimensions. The 34.2% reduction in overall market risk between 2019-2021 and 2022-2023 corresponded with a 43.7% increase in sales revenue, 78% improvement in net profit margin, 61.9% enhancement in inventory turnover, 71.3% reduction in stock-outs, and 56.1% expansion in customer base. Regression analysis confirmed that market risk reduction accounted for 68.3% of variance in overall business performance, demonstrating its dominant influence on organizational outcomes.

The relationship between market risk and performance operated through multiple interconnected mechanisms. Reduced input price volatility enabled better cost management, strategic procurement, and profit margin protection. Decreased demand variability allowed optimized production planning, efficient inventory management, and improved resource allocation. Enhanced supply reliability supported consistent operations, quality maintenance, and customer service excellence. Moderated competitive intensity provided breathing room for value-based competition rather than destructive price wars.

Beyond direct operational effects, reduced market risk generated psychological and relational benefits that amplified performance impacts. Stakeholder confidence increased—employees invested in skill development knowing their positions were secure, customers consolidated purchases trusting in reliable supply, suppliers prioritized the enterprise recognizing it as a stable partner. These confidence effects created virtuous cycles where reduced risk enabled performance improvements that further reduced risk through stronger market positions and accumulated capabilities. The transformation from high-risk to reduced-risk operations fundamentally altered Mutima Quality Feeds' strategic possibilities. High market risk forced reactive, short-term decision-making focused on survival. Crisis management consumed managerial attention, leaving little capacity for strategic planning or improvement initiatives. Reduced market risk enabled proactive, long-term strategic orientation. Management could confidently invest in equipment, market development, and capability building, knowing stable operations would provide time for investments to yield returns.

For the broader feed industry context, this study demonstrated that market risk management constituted not merely a defensive necessity but a strategic opportunity. While risk mitigation required investments in supplier diversification, forward contracts, storage capacity, market intelligence, and customer relationship management, these investments generated returns far exceeding costs through improved financial performance, operational efficiency, and market positioning. Feed enterprises operating in volatile developing economy contexts should view risk reduction as a pathway to competitive advantage rather than simply a cost of doing business.

7. Recommendations

The enterprise should continue and deepen its market risk mitigation strategies given their demonstrated performance benefits. Priority actions should include expanding forward purchase contracts to cover 70-80% of key ingredient requirements (currently approximately 50%), establishing contracts with minimum 6-month duration to capture longer-term price trends. The enterprise should formalize relationships with farmer cooperatives through supply agreements providing volume commitments in exchange for preferential pricing and payment terms, creating demand stability while strengthening market position.

Investment in expanded storage capacity would further buffer against supply disruptions and enable opportunistic purchasing during low-price periods. Current storage capacity of approximately 200 tons limits the ability to capitalize fully on favorable market conditions. Expanding to 350-400 tons capacity would provide 6-8 weeks of ingredient inventory, sufficient to weather most supply disruptions and capture seasonal price advantages.

Management should institutionalize market intelligence capabilities through dedicated monitoring of commodity price trends, weather patterns affecting agricultural production, policy changes impacting trade and taxation, and competitive dynamics. Systematic intelligence gathering would enable anticipatory risk management rather than

reactive responses. Subscription to commodity market information services and participation in industry associations would enhance information access.

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